

ABSTRACT

Cable modem main processor and RF circuitry is turned off during off-site power loss when an RF communication channel is absent. A timer periodically wakes up the processor to determine whether an RF channel
5 has been restored. A controller implements the timer and interacts with an RF detector. These components use less power than the main processor circuitry. Accordingly, energy is conserved while the processor is asleep.

If AC power is restored while the timer counts, the processor is awakened. If an RF channel is detected while awake, the modem reboots
10 into ready mode.

The RF detector supplements the timer to wake up the processor if RF energy is detected so the processor can scan for potential RF channels before the timer finishes counting. The RF detector and RF circuitry of the processor may share passive components such as a coupler, filters and
15 diplexer.